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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/700,857	11/04/2003	Young H. Kim	CL2207USNA	6319
43693	7590	10/31/2008	EXAMINER	
INVISTA NORTH AMERICA S.A.R.L. THREE LITTLE FALLS CENTRE/1052 2801 CENTERVILLE ROAD WILMINGTON, DE 19808			TRAN, THAO T	
			ART UNIT	PAPER NUMBER
			1794	
			NOTIFICATION DATE	DELIVERY MODE
			10/31/2008	ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

Kathy.L.Crew@invista.com  
iprc@invista.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/700,857	<b>Applicant(s)</b> KIM ET AL.	
	<b>Examiner</b> Thao T. Tran	<b>Art Unit</b> 1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 16 July 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

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### **DETAILED ACTION**

1. This is in response to the Appeal Brief filed 7/16/2008. Upon further consideration, the finality of the previous Office action is hereby withdrawn pursuant to 37 CFR 1.129(a).
2. Claims 1-29 are currently pending in this application.
3. In view of the prior Office action, the 102(b) rejection as anticipated by Bialke of claims 20-22 and 24-29 has been withdrawn. All claims are now rejected under 103(a).

### ***Claim Rejections - 35 USC § 103***

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
5. Claims 20-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bialke et al. (US Pat. 6,794,475) as applied to claims 20-21 above.

Bialke discloses an aqueous polyurethane-urea dispersion (PUD) used in making gloves, films, or sheets (see abstract; col. 1, ln. 6-9; col. 10, ln. 8-10), the PUD dispersion comprising polymerized units of diisocyanate and hydrophilic moiety, and of polyols. The diisocyanates include toluene diisocyanate. The polyols include polyesters, such as polyester of adipic acid and ethylene glycol (see col. 8, ln. 39-59). The hydrophilic moiety is dimethylol propionic acid (see col. 9, ln. 20-21). Note that the propionic acid is to provide the hydrophilic moiety into the PUD to stabilize the dispersion in water, thus it is a surfactant. Moreover, Bialke teaches the use of surfactants in the dispersion (see col. 9, ln. 67).

The reference further discloses that branching agents and crosslinking agents are optional (see col. 9, ln. 32-33, paragraph crossing col. 9-10) or that the PUD comprises diol, diamine, or

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both (see col. 8, ln. 42-44). Thus, the PUD of Bialke can be exclusive of the chain extenders or crosslinker.

Bialke does not teach a specific amount of urea units to be less than about 2 mole %. However, it has been known in the art that the amount of urea units would have been dependent on the amount of the diamine used. Therefore, it would have been obvious to one of ordinary skill in the art that the amount of the urea units would have been achieved by adjusting the amount of the diamine used in order to obtain the desired results.

Bialke teaches the use of dimethylolpropionic acid, and not 2,2-dimethanolpropionic acid. However, it would have been obvious to one of ordinary skill in the art that substituting one acid for another would have been given the same effects because these two propionic acids have been used as alternatives of each other in the art.

6. Claims 1-19, 23, and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bialke as applied to claims 20-22 and 24-29 above, and in view of Soto et al. (US Pat. 5,008,325) or Taub (US Pat. 3,404,131).

Bialke is as set forth in claims 20-22 and 24-29 above and incorporated herein.

Bialke discloses the polyols to be polyethers including alkylene oxides, such as ethylene oxide, propylene oxide and tetrahydrofuran (see col. 9, ln. 4-6).

Bialke, however, does not disclose the use of a copolymer of tetrahydrofuran and an alkylene oxide and/or a cyclic acetal; or the molecular weight of the polyether.

Soto teaches a film prepared from an ionic polyurethane-urea polymer using a polyether polyol of tetrahydrofuran and ethylene oxide and/or propylene oxide copolymer (see col. 6, ln. 22-43) having a molecular weight of 800-2000 (see col. 5, ln. 11).

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Taub teaches a film made of polyether-urethane-urea polymer using a polyether polyol copolymer of tetrahydrofuran and ethylene oxide or propylene oxide, having a molecular weight of 1000 to 2000 (see col. 2, ln. 52-56).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have employed the copolymer polyol, as taught by Soto or Taub, in the PUD of Bialke. The use of a polyether polyol copolymer has been known to enhance stabilization effect of the PUD in a continuous phase and color stability of the product.

7. Claims 1-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakamura et al. (US 2003/0225239).

Nakamura discloses a film comprising a urethane-urea made from a polyol, a polyisocyanate, a polyamine (see abstract; text). Although, Nakamura does not specifically teach the amount of urea to be less than 2 mole %, the reference does teach that the amount of urea depends on the amount of polyamine used (see [0133]). Therefore, it would have been obvious to one of ordinary skill in the art that the amount of urea would have been achieved by adjusting the amount of polyamine used in order to obtain the desired results.

### ***Response to Arguments***

8. Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection.

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***Contact Information***

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thao T. Tran whose telephone number is 571-272-1080. The examiner can normally be reached on Monday-Friday, from 9:00 a.m. - 5:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Milton I. Cano can be reached on 571-272-1398. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Thao T. Tran/  
Primary Examiner, Art Unit 1794

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